

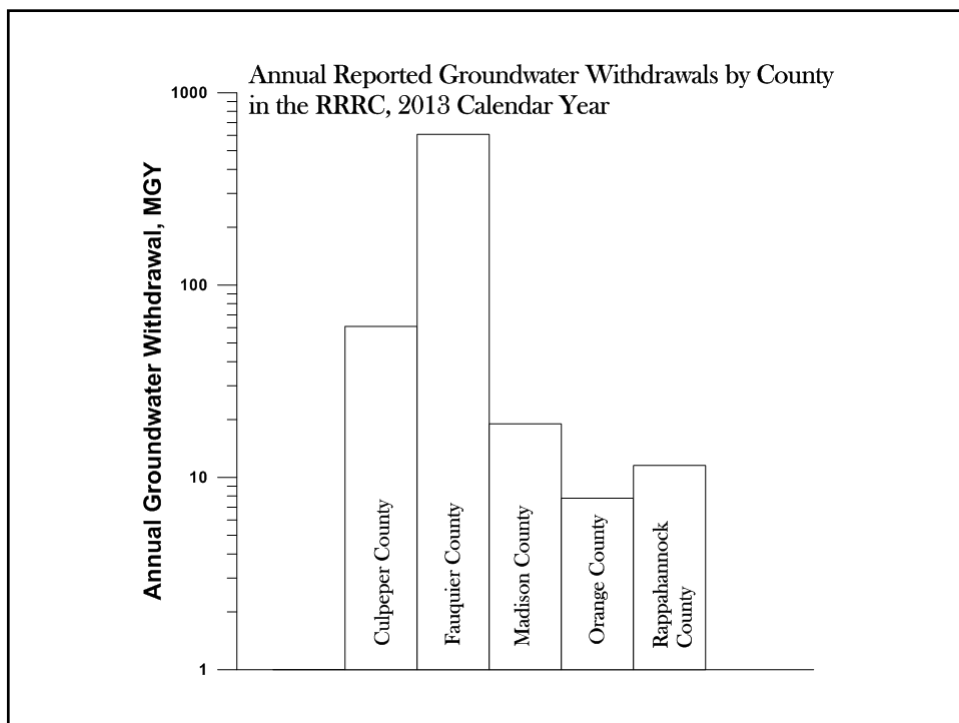
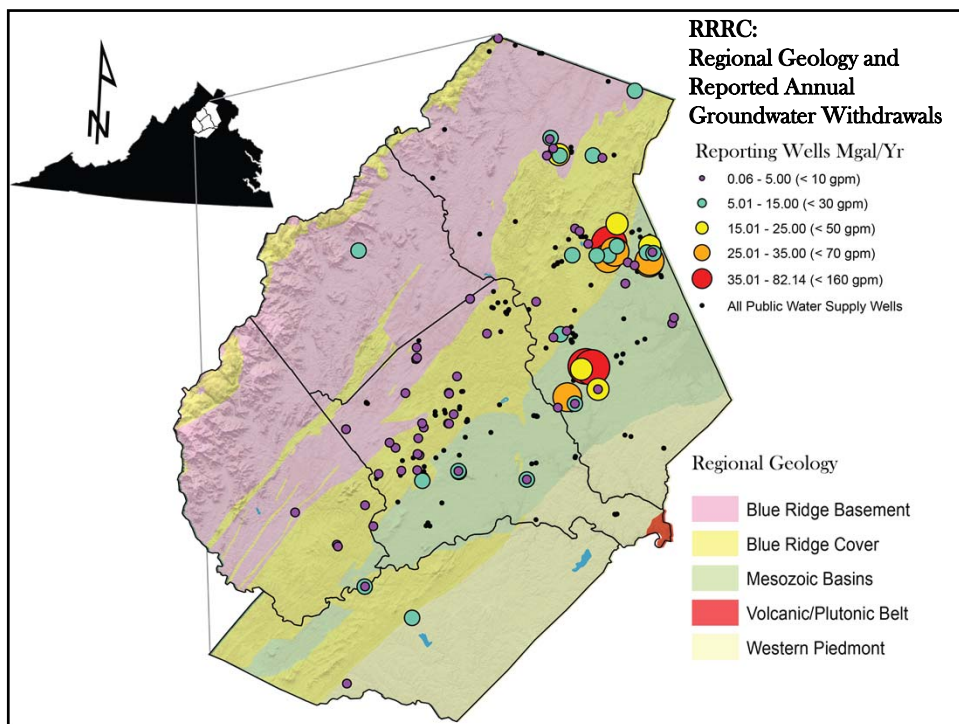


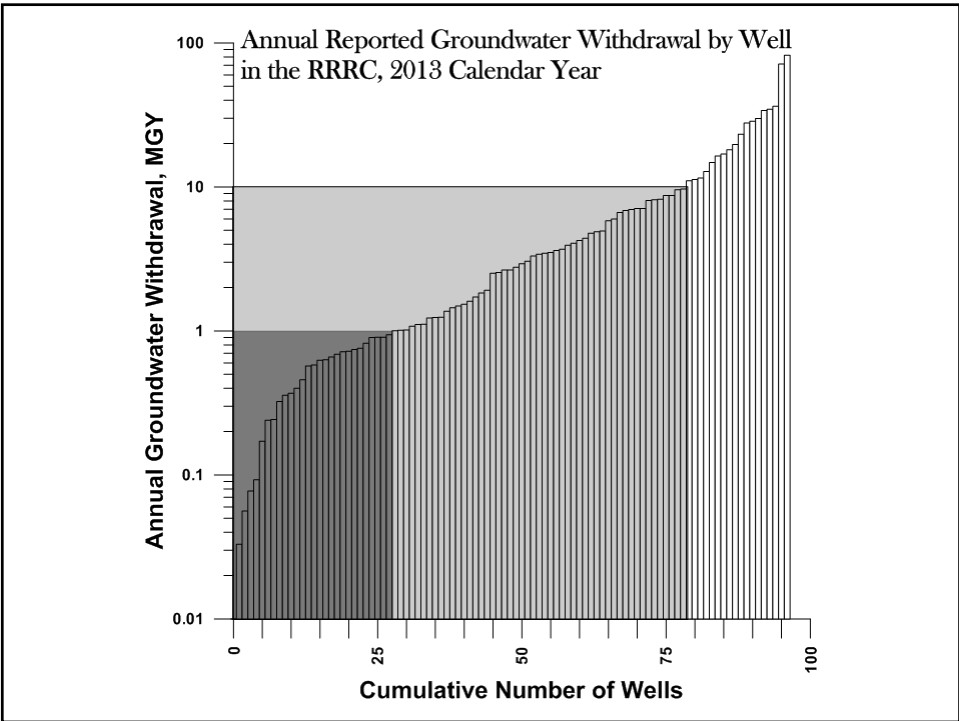
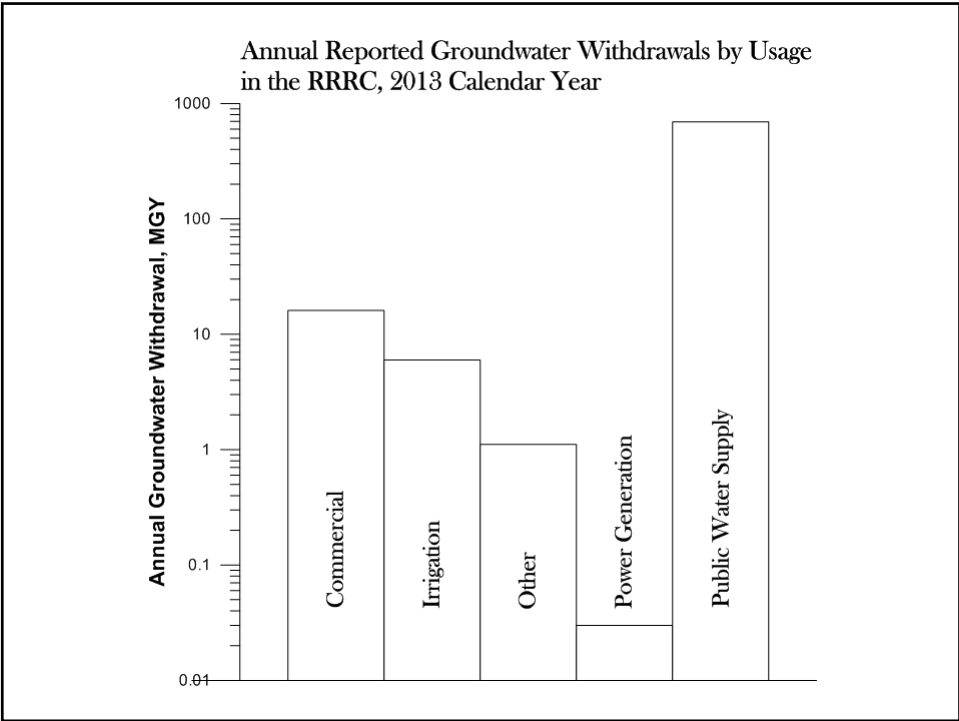
Groundwater Supply and Status in the RRPDC

Brad White, Virginia DEQ Groundwater
Characterization Program

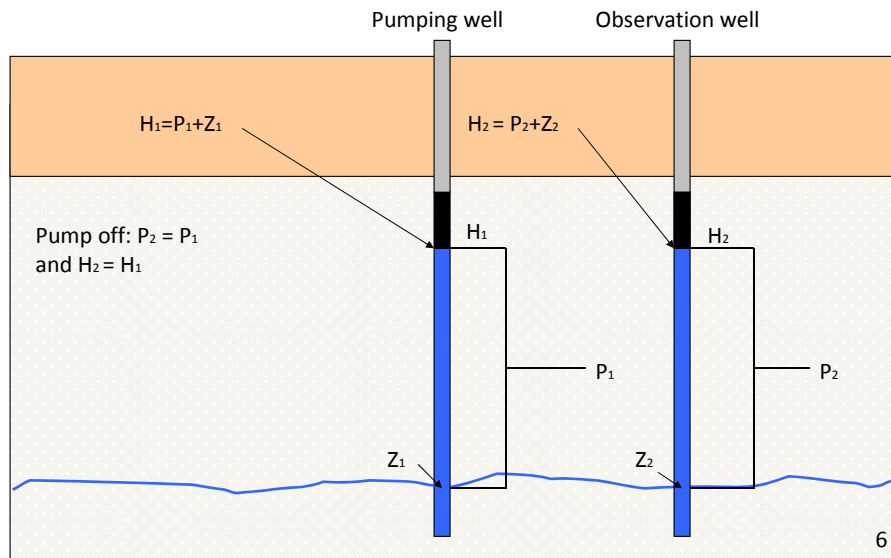
Overview

- Current reported groundwater use in the RRRC (2013 calendar year)
- Basic Hydro
- Assessing “status” of the GW resource in fractured rock groundwater systems
- Areas of future GW development in the RRRC



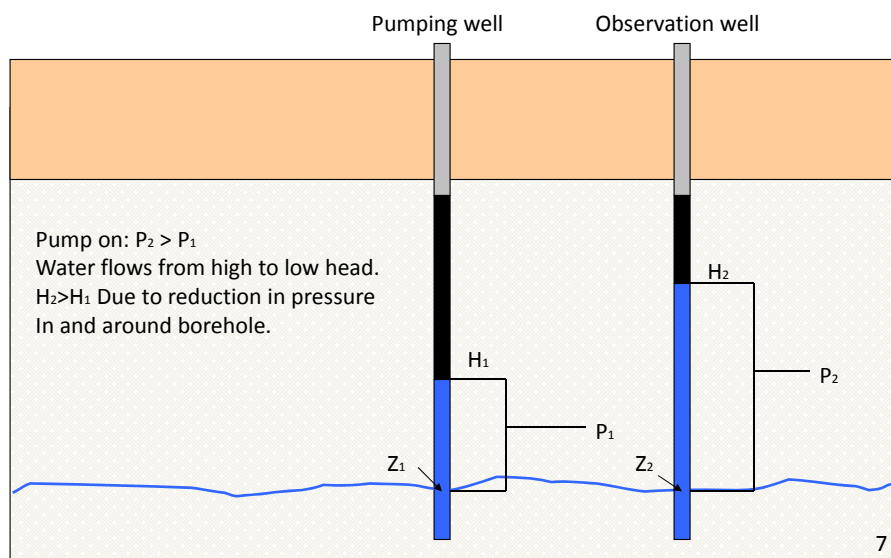


Drilled Wells

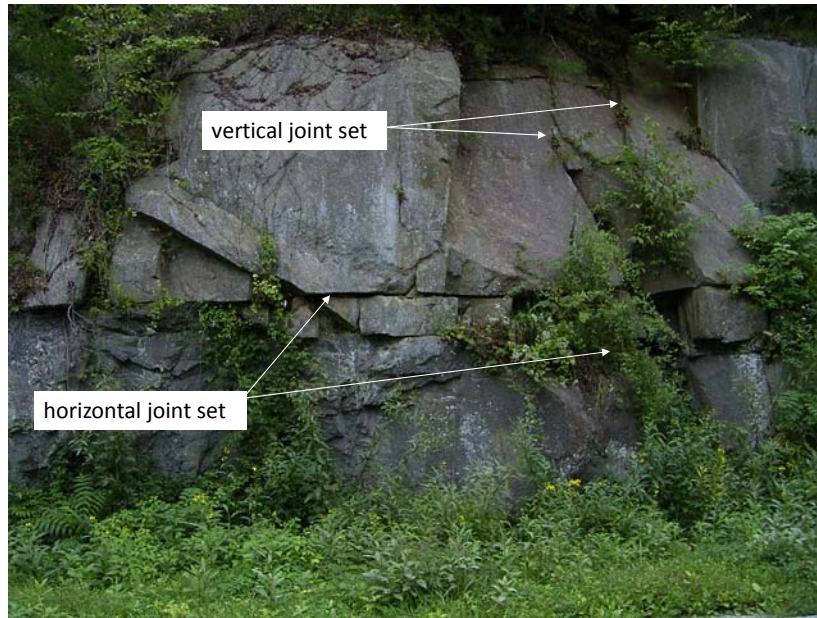


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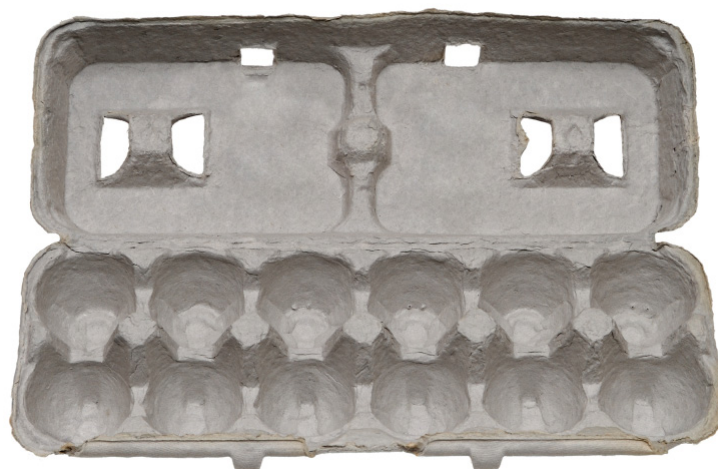
Drilled Wells



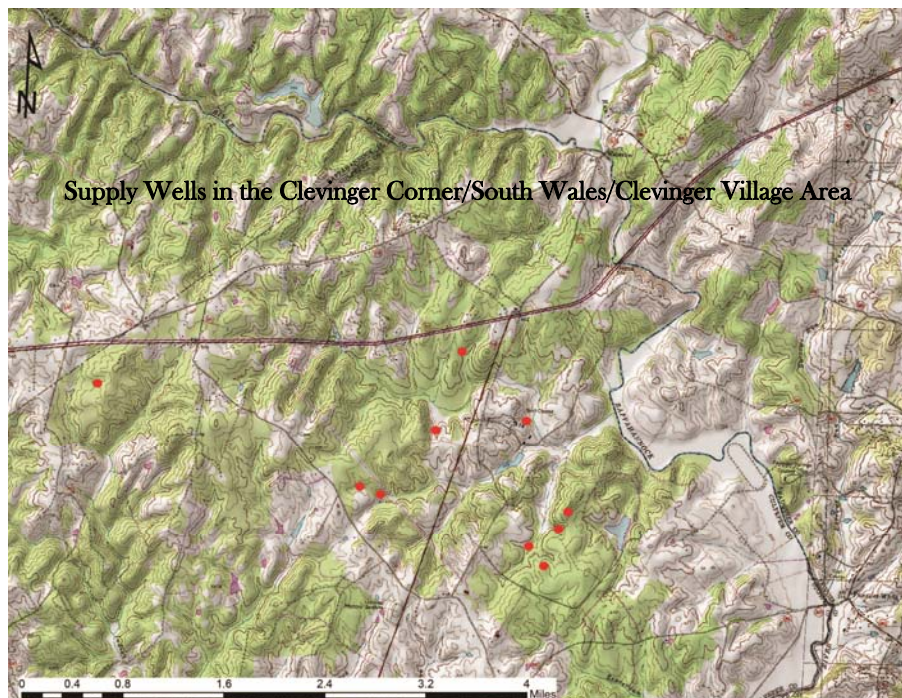
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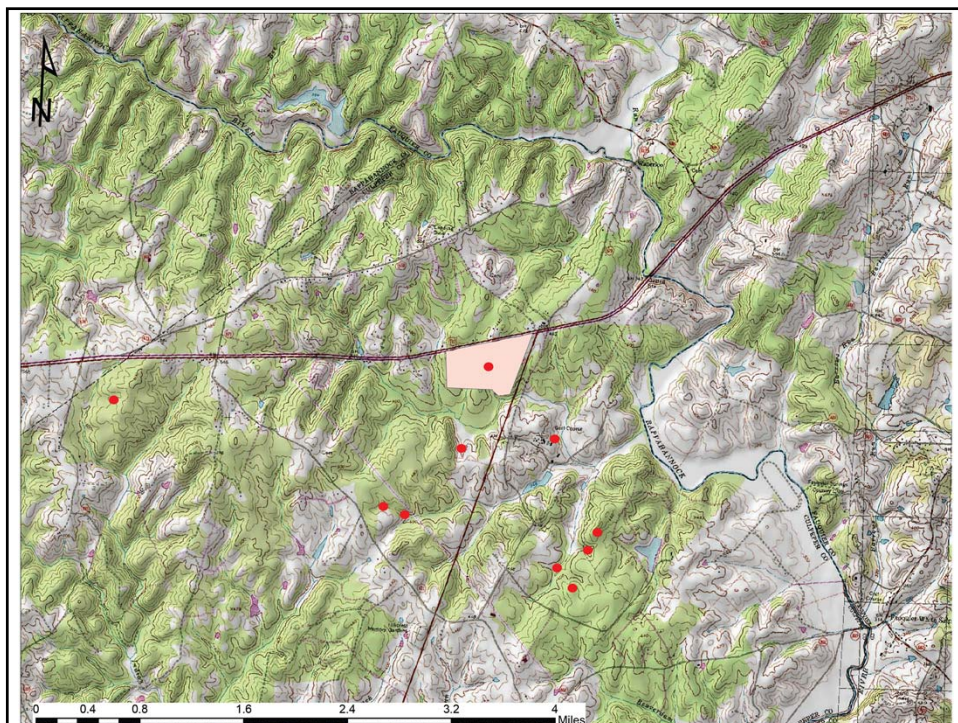
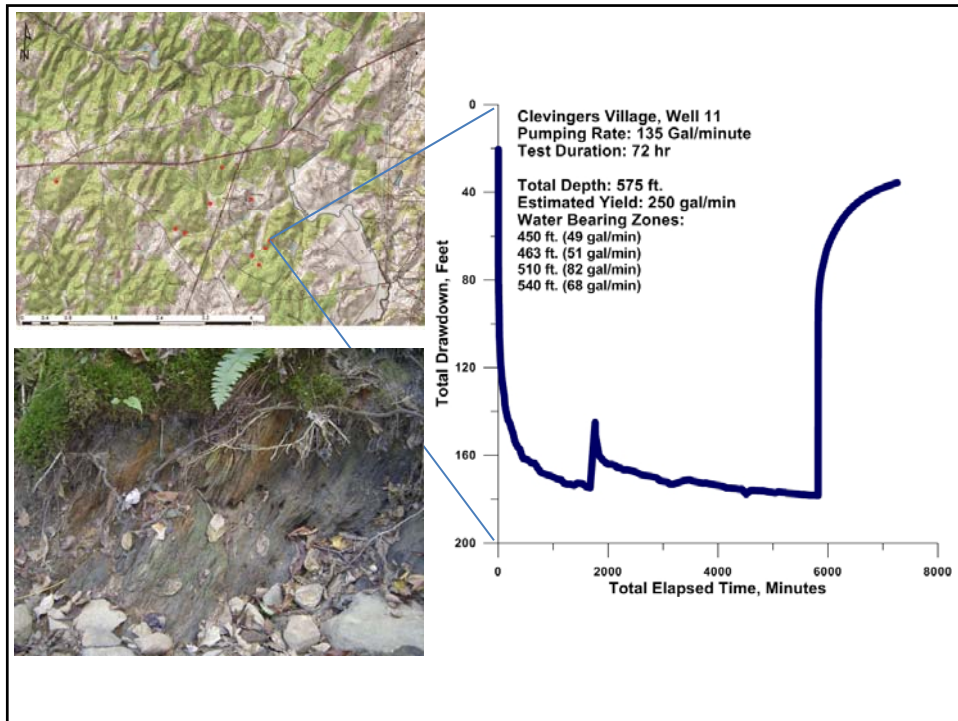


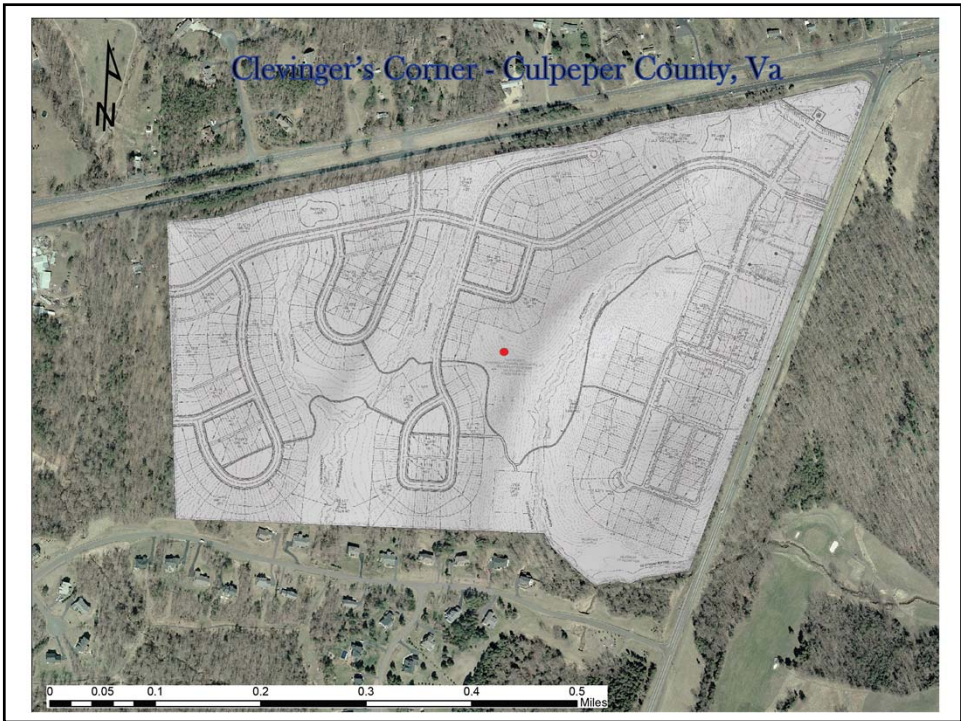
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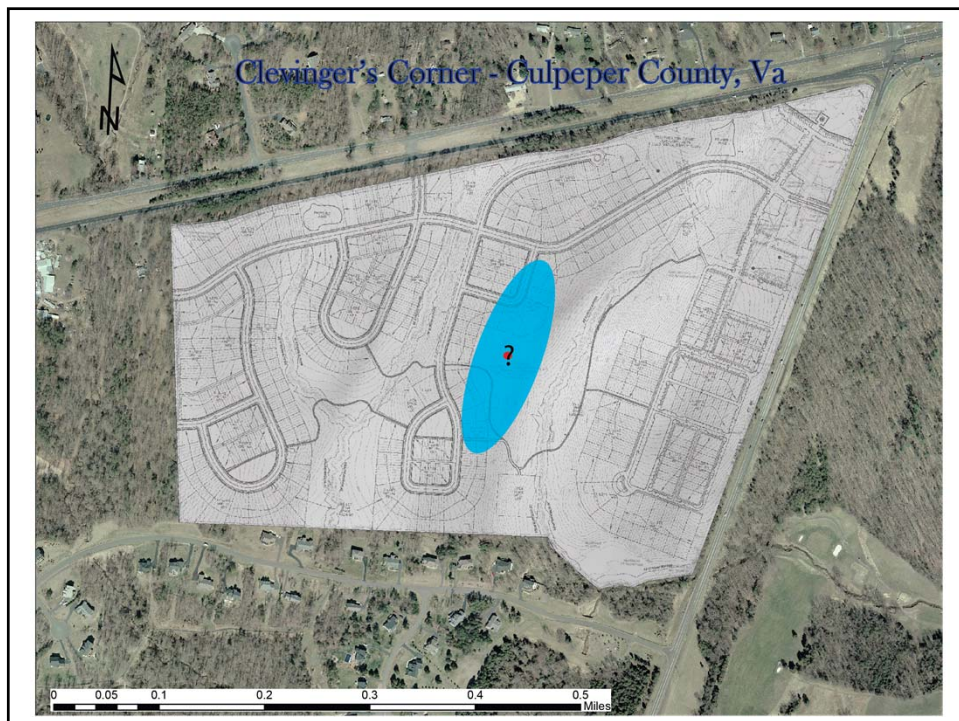
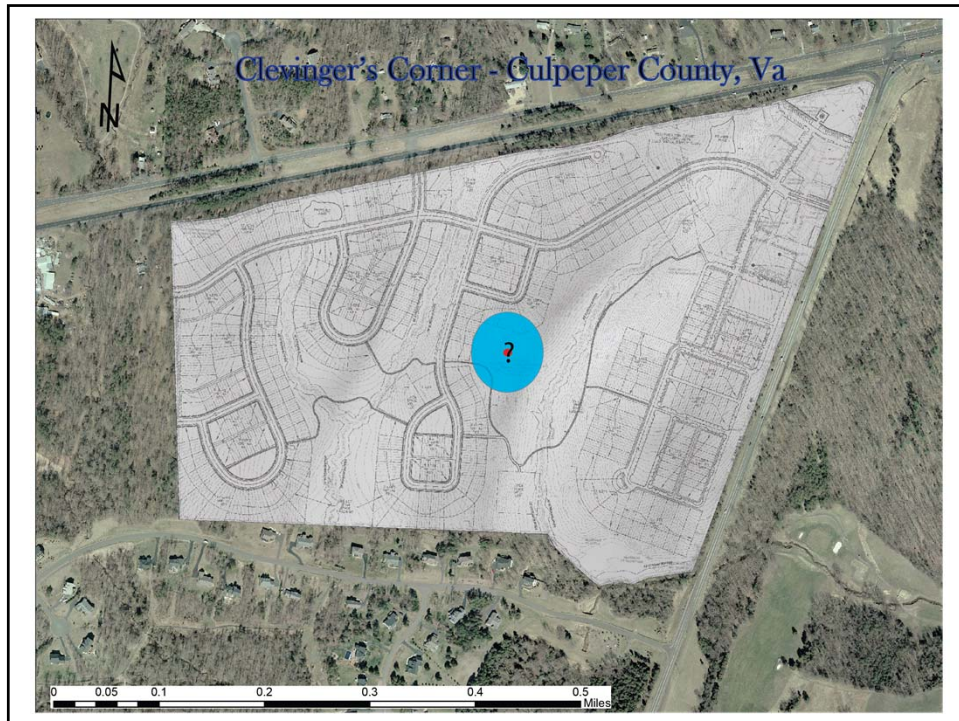


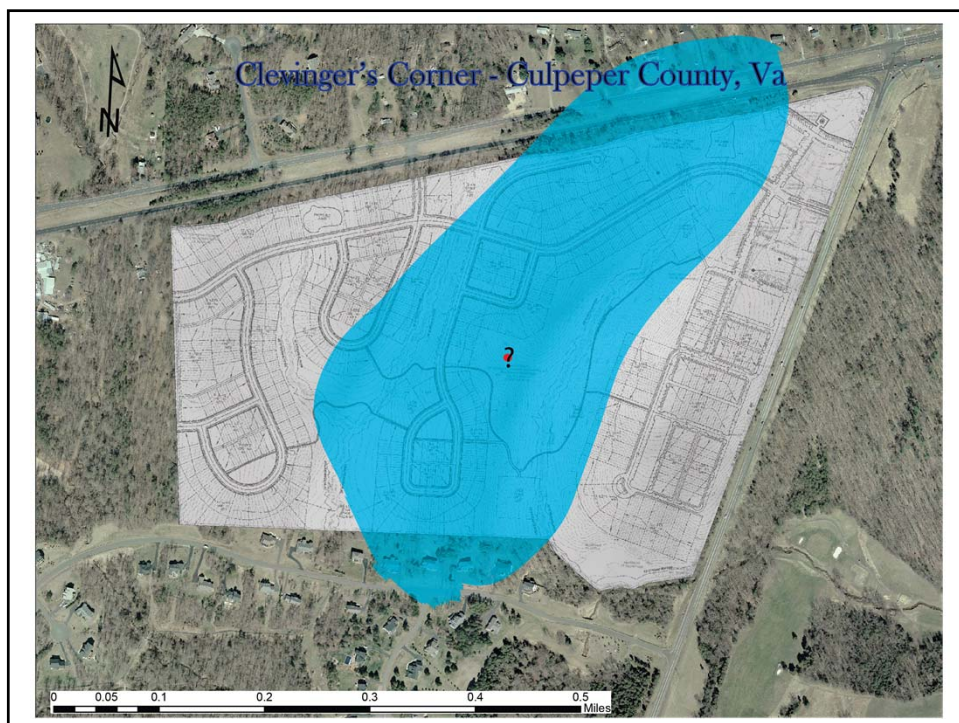
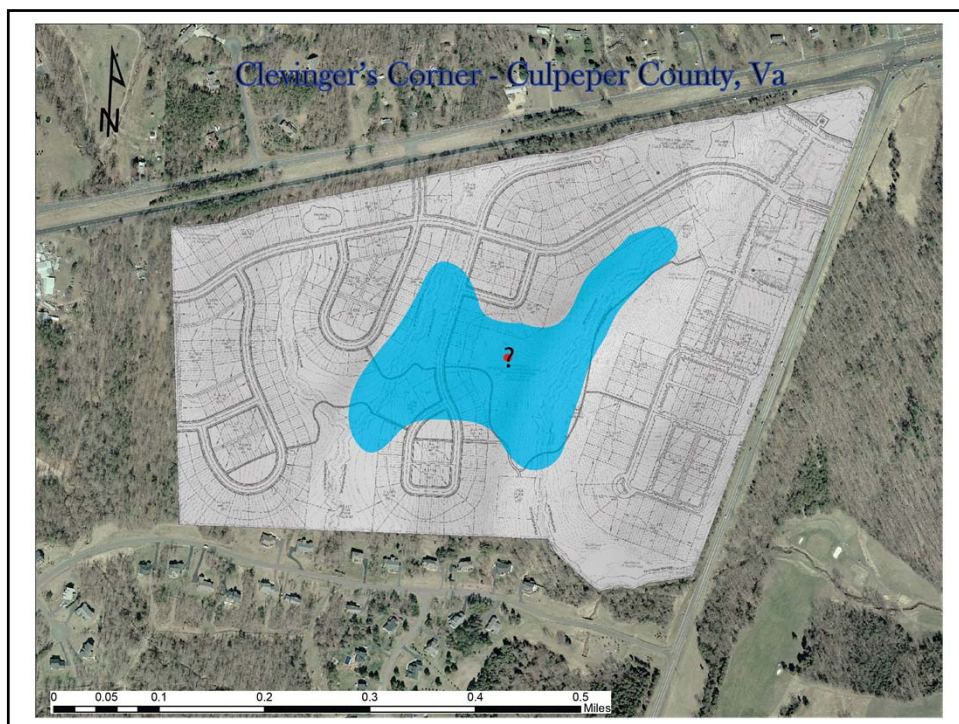
- Inside a Well

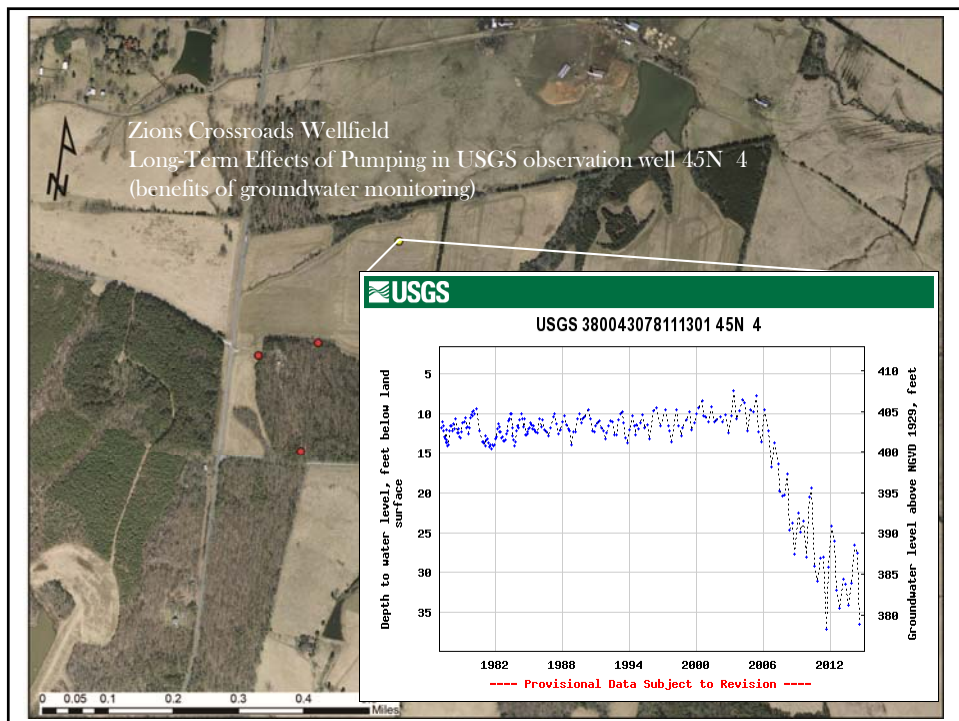
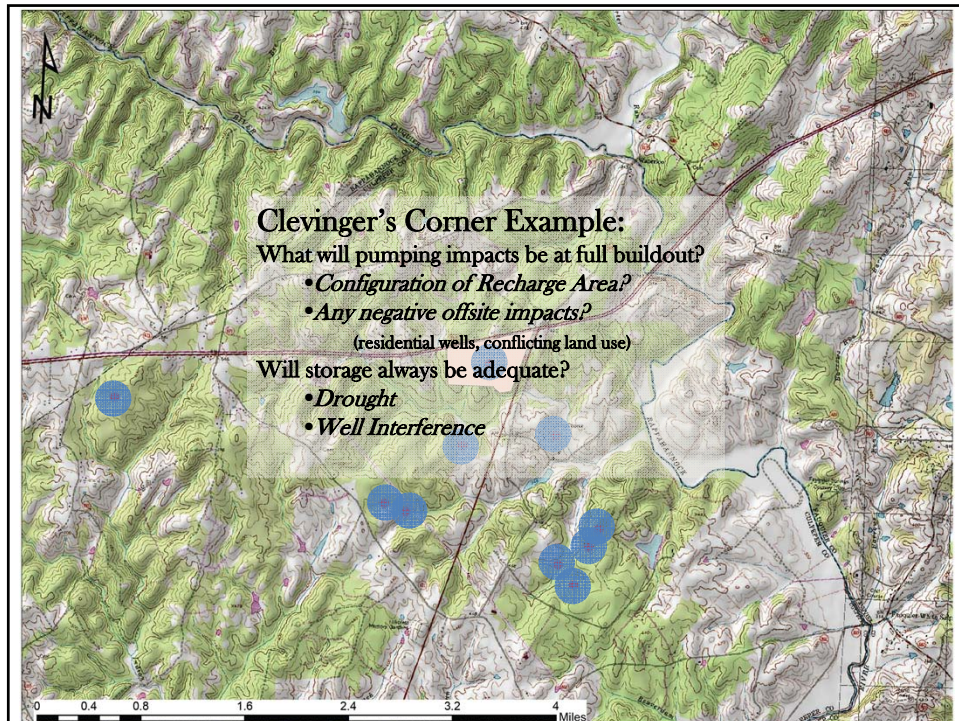


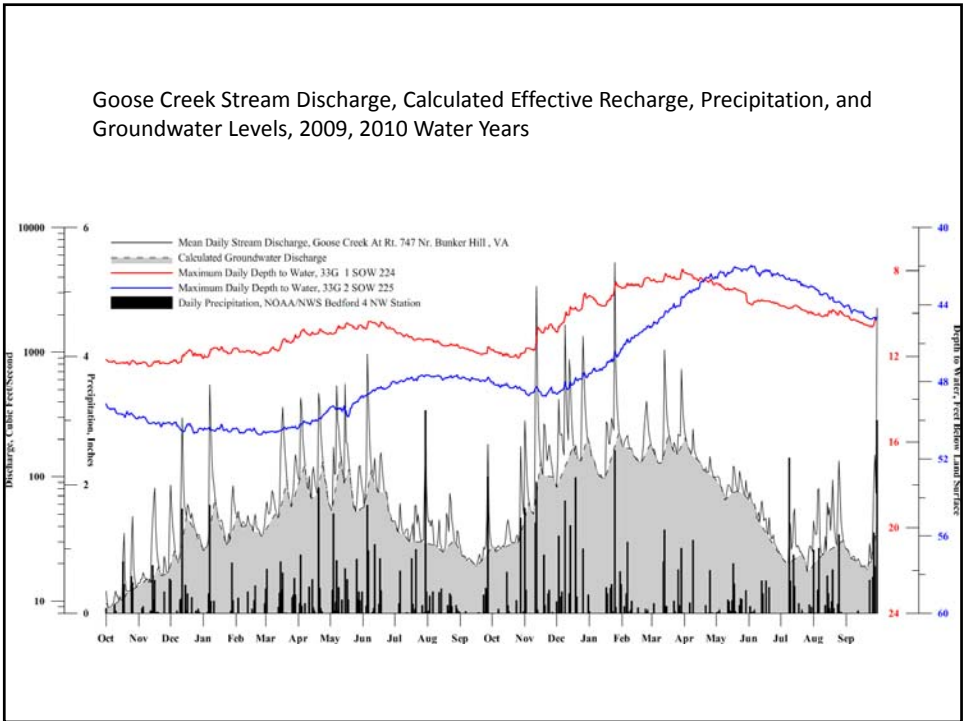
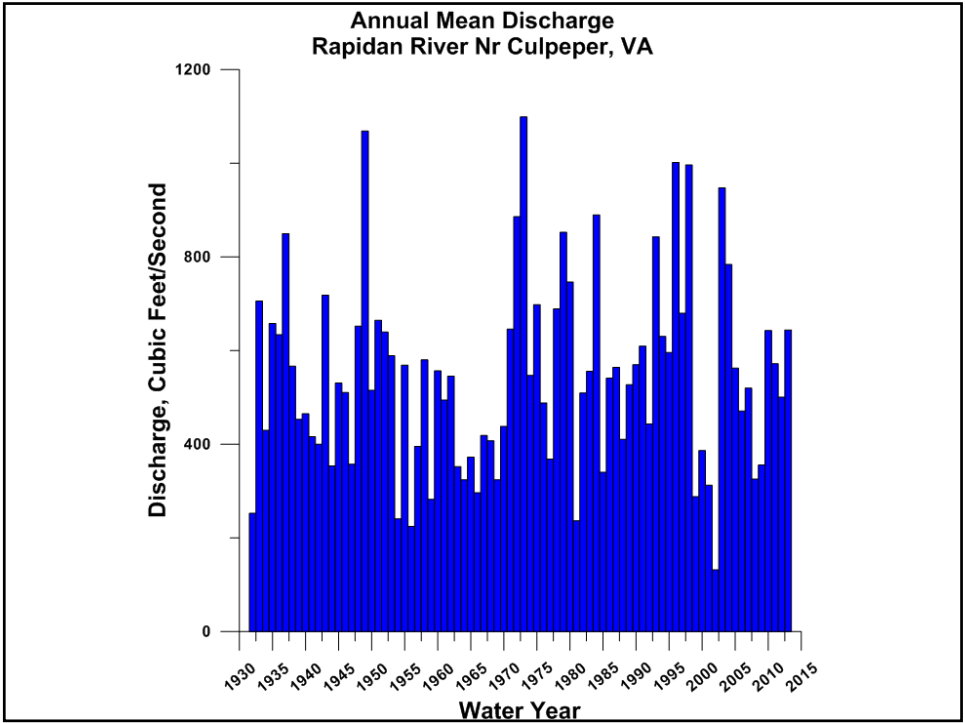












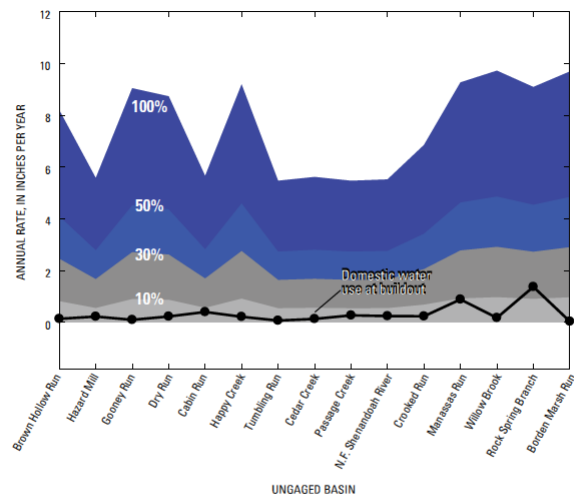
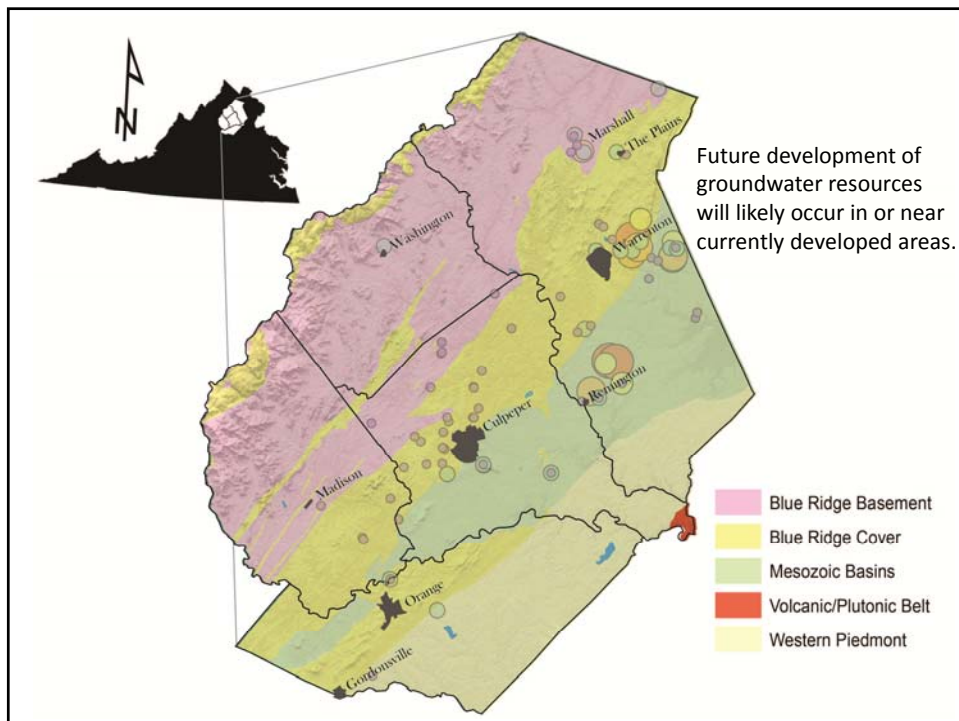


Figure 30. Relation between estimated domestic water usage at buildout and varying percentages of annual effective recharge estimated from the linear regression method of Yager and others (2008) for ungaged basins in Warren County, Virginia. Domestic usage is based on 2.48 individuals per parcel multiplied by 75 gallons per day per person normalized over the drainage basin area.

(Nelms et.al 2010)



Conclusions

- Majority of reported groundwater withdrawals are for public water supply.
- More attention should be focused on monitoring and delineation of the groundwater resource (as development continues in areas already extracting groundwater).
- As more is known about available groundwater and the limits of individual systems, management of groundwater will improve.